

REMARKS

Claims 1 to 4 remain canceled. Claims 8 and 14 have been canceled by this Amendment

Claims 5 to 7; and 9 to 13 have been amended. New claims 15 to 24 are presented.

Claims 5 to 7; 9 to 13; and 15 to 24 remain in the application, totaling eighteen claims. Of these, claims 5, 6, and 7 are independent assembly claims. Claims 10; 17; and 21 are method claims dependent upon, respectively, claims 5, 6, and 7.

Reexamination and reconsideration are respectfully requested in light of the amendments and the remarks that follow.

Claim 5 stands rejected under 35 U.S.C. § 102(b) based upon Haig (US 4,494,535). Claims 6; 7; and 9 to 13 stand rejected under 35 U.S.C. § 103 based upon various combinations of Makower et al. (US 5,380,290); Scholten et al. (US 4,969,888); Witt (US 4,842,585); and Lombardo (US 6,488,653).

With regard to Haig, Makower, and Witt, none of them teaches or suggests a cannula that is sized and configured to establish a path into bone for the placement of an expandable bone treating structure, which expands from within the cannula through an opening in the side wall of the cannula.

(1) In Haig, nothing except a liquid polymer exits the port 20. Haig also does not teach or suggest a surface on a distal end region of the cannula that is spaced, at least in part, distally of the distal terminus of the opening to anchor the distal end region in cortical bone. In Haig, the surface 17 ends proximal of the distal terminus of the port 20.

(2) In Makower, the slot 26 serves only as an entrance for a catheter and not as an exit for anything.

(3) In Witt, no part of the catheter 20 exits the opening 12 by expansion, but is merely threaded through the opening 12.

The Examiner's reliance upon Scholten as an obviousness reference in combination with these documents is also misplaced. Scholten always expands the balloon when it is outside the cannula. Scholten does not teach or suggest expanding the balloon 65 when inside the cannula, to allow the balloon to expand from an opening in the cannula (e.g., from the open distal end). The same holds true for Lombardo. There is nothing (except hindsight) to justify transforming Scholten to expand the balloon from inside the cannula. This feature -- the expansion of the expandable

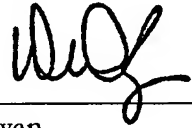
body through an opening when within the bore of a cannula -- is defined in all the independent claims.

In this respect, the Examiner attention is also directed to Berger US 5,545,136 (which is of record). Berger likewise fails to teach or suggest a cannula that is sized and configured to establish a path into bone for the placement of an expandable bone treating structure. Berger is also incompatible with Scholten, because Scholten does not teach or suggest expanding a balloon in bone through an opening from inside a cannula. Berger further fails to teach or suggest other features defined in the claims, e.g., a cortical bone anchoring surface (independent claim 5); a distal opening to accommodate passage of a guide pin (independent claim 6); a solid bore between the terminus of the opening and distal end of the cannula (independent claim 7); and the use of radio opaque markers for locating the expandable bone treating structure within the opening (dependent claims 9, 15, and 16).

Allowance of claims 5 to 7; 9 to 13; and 15 to 24 as amended is respectfully requested.

Respectfully Submitted,

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